



# **THE IMPACT OF ADOPTING GREEN MARKETING MIX STRATEGY ON CUSTOMER SATISFACTION IN EGYPTIAN MARKET**

**Mostafa Ahmed Shalash**

PhD, Fellowship, MBA

Faculty of Financial & Administrative Sciences, Pharos University, Alexandria, Egypt

m.shalash@pua.edu.eg

## **Abstract**

*In recent times, environmental issues play an important role in business environment due to increasing environmental awareness of consumers around the world. Moreover, in the modern age of globalization, it has become a challenge for any corporate to keep its customers due to the competition that has been drastically changed by the increasing concern toward environmental sustainability. So, it becomes vital requirement for all corporates to adopt new strategies to maintain their customers and attract new ones. One of these strategies is adopting green marketing mix strategy. Marketing identifies consumers' needs and supplies them with various goods and services to satisfy those needs most effectively. So, any organization concentrates on four major marketing activities, namely, (1) product, (2) price, (3) promotion, and (4) place (distribution). These 4 P's elements constitute the elements of marketing mix. In the light of sustainable development requirements, Business enterprises should give up the traditional marketing mix concept and move towards adopting the green marketing mix strategy. Egyptian consumers have become more demanding regarding to their needs for environmentally friendly products and they became more willingness to pay a higher premium for such products. So in this context, green marketing constitutes a proactive strategy for all companies to meet market needs by introducing products which reduce any detrimental impact on environment. The main objective of this study is to seek a better understand the impact of the firm's adopting the green marketing mix "as a marketing strategy" on customer satisfaction in Egyptian market and the contribution of each component of this marketing mix in achieving this satisfaction. The findings indicate that the green marketing mix has a positive impact on Egyptian customer satisfaction.*

*Keywords: Marketing mix, Green marketing mix, Customer satisfaction, Sustainable marketing*



## INTRODUCTION

The world is becoming more concerned about environment issues, and as a result, most of corporates start to modify their business strategies .One of these strategies is adopting green marketing mix strategy. According to American Marketing Association, green marketing is defined as the marketing of those products that are safe in respect of the environment and have no harmful effects on the environment.

The concept of green marketing is crucial for achieving sustainable development because it contributes to cost savings, leads to increasing exports, helps to establish the company's green image, enables the company to be more competitive (Zaharia et al., 2010). Also, green marketing concept is linked to socially responsible business, where business success is not only focused on profit but also on environmental protection. Globally we are facing many challenges related to the environment. To overcome them, numerous concepts and approaches have been developed. One of them is green marketing (Domazet & Simovic, 2015).

Green marketing refers to the organization's efforts in production, promotion, pricing and distribution that will not harm the environment (Pride and Ferrell, 1993). Polonsky (1994) considers that green marketing consists of activities designed to generate and monitor exchange that aims to meet the needs and desires of people, so that this satisfaction is occurring with minimal harmful effects on the natural environment. As resources are limited and human wants are unlimited, it is important for the marketers to utilize the resources efficiently without waste as well as to achieve the organization's objective. So green marketing is inevitable (Nandini, 2011). It can be concluded that green marketing promotes a way of doing business that aims to create products that will use the minimum resources in order to meet the needs of consumers.

Applying the concept of green marketing provides benefits to individuals, organizations and the environment. It helps individuals take care of their health more actively, by assisting them to use healthy products, and enables organizations to save on resources and reduce costs in the long run, which will result in reduced harmful effects on the environment. Although most of researches dealt with the traditional marketing, the concept of green marketing is still in the infancy stage (Ghoshal, 2011). Thus, it is really important for Egyptian producers to know more about their customers' needs and work to increase their satisfaction. Therefore, this research provides a comprehensive understanding of the green marketing mix and how it contributes to increasing customer satisfaction in Egyptian market.

## GREEN MARKETING

Companies have been showing growing interest in the adoption of practices related to green issues to mitigate risks and increase their chances of survival. Human beings are becoming more concerned about environment issues, and as a result, the corporates started to modify their business strategies, one of these strategies is adopting green marketing strategy. Green marketing is one of the most important business strategies that help in ensuring sustainable development. So, a Particular attention must be paid to the way products are manufactured and how they are consumed (Domazet and Jovanovic, 2016).

Stanton and Futrell (1987) as well as the Mintu et al. (1993) were among the first researchers who initially dealt with this issue. The core of their concepts is that green marketing, in a wider sense, implies the marketing of activities that will make the exchange of goods satisfies the needs of consumers, while reducing at the same time the impact of these activities on the environment.

Majority of people believe that green marketing refers solely to the promotion or advertising of products with environmental characteristics. Indeed, green marketing is a much broader concept that can be applied to consumer goods, industrial goods and even services (Polonsky, 1994). Thus, green marketing incorporates a broad range of activities including product modification, changes to the production process, packaging changes, as well as modifying advertising. Yet, defining green marketing is not a simple task.

According to Stanton and Futrell (1987), green marketing is all activities designed to generate and facilitate any exchanges intended to satisfy human needs and wants. Pride and Ferrell (1993) defined green marketing as it is organization's efforts in production, promotion, pricing and distribution that will not harm the environment. Polonsky (1994) has defined it as "green or environmental marketing consist of all activities designed to generate and facilitate any exchange intended to satisfy human need or wants, such that the satisfaction of these needs and wants occurs, with minimal detrimental impact on the natural environment". De Craecker and De Wulf (2009) defined green marketing as "the process of developing and promoting products and services that satisfy the customers' wants and needs for quality, performance, affordable pricing and convenience without having a detrimental impact on the environment". Nandidi (2011) referred to green marketing as the marketing that involves developing and promoting products and services that satisfy customers want and need for Quality, Performance, Affordable Pricing and Convenience without having a detrimental input on the environment. Manju (2012) stated that the green Marketing refers to a holistic marketing concept wherein the production, marketing, consumption and disposal of products in a manner that is less detrimental to the environment. Krishna (2017) has defined the green marketing as it

is an important concept to achieve the balance between customers' needs on one hand and preserving the environment on the other hand. Belz and Peattie (2012) explained that traditional marketing management refers to planning, organizing, implementing and controlling marketing resources and programs to satisfy consumers' wants and needs, in order to achieve organizational objectives. Green marketing management also refers to all those activities, but in addition includes consideration of social and environmental criteria.

It is clear from previous definitions that the green marketing and sustainable development are linked to common goals, so different green marketing activities impact on achieving sustainable development (Domazet and Simovic, 2015). It is also linked to socially responsible business, where business success is not focused solely on profit but also on environmental protection. So, we can say the green Marketing concept has emerged as conceptual and sustainable tool to balance between the business activities and protection of our natural environment.

#### **WHY ADOPTING THE GREEN MARKETING STRATEGY IS AN URGENT NECESSITY?**

- The consumers of developed and developing countries are being more interested regarding their needs for environmentally friendly products and they became more willingness to pay a higher premium for such products. So in this context, green marketing considers a proactive strategy for most companies to meet the market needs by imparting nature-friendly products and services that minimize any detrimental impact on environment (Ghoshal, 2011).
- As firms face limited natural resources, they must develop new or alternative ways of satisfying these unlimited wants. Green marketing looks at how marketing activities utilize these limited resources, while satisfying consumers wants as well as achieving the company's objectives.
- All civilized countries governments have the law to protect the consumers and the environment from the harmful goods, and ensure through law that all consumers have the ability to evaluate the environmentally friendly goods and services.
- Applying green marketing approach for products and services promotes the integration of environmental issues into all aspects of the corporate activities; from strategy formulation, planning, reengineering in production process and dealing with consumers.
- The companies should achieve the balance between marketing activity and environmental needs to remain competitive within the challenge thrown by the environment protectionists. This, of course, will only be achieved by applying the green marketing strategy in all its

practices; product redesign, changes in production process, changes in customer handling, packaging changes, modifying advertising methods, etc. ?

## **MARKETING MIX**

Once the organization targeted its own customers group, the next step is the product or service should be put in the market for those customers by providing the appropriate product, price, distribution and promotional efforts. These elements should be combined or mixed in an appropriate proportion so as to achieve the marketing goal. Such mix of product, price, distribution and promotional efforts is known as 'Marketing Mix'. So, marketing mix refers to the set of activities that a company uses to promote its brand in the market.

According to Kotler (2003), marketing mix is the set of controllable variables that the firm can use to influence the consumer buying decisions. These controllable variables in this context refer to the 4 Ps; product, price, place (distribution) and promotion. Each firm strives to build up such mix of 4Ps which can create highest level of customer satisfaction and at the same time meet its organizational objectives.

## **GREEN MARKETING MIX**

Green marketing mix refers to a set of marketing tools and elements that allows the firm to serve the target market and achieve organizational goals without harming the natural environment and consequently furthering the sustainable development (Al-Salaymeh, 2013). In other words, green Marketing mix is a concept emphasizing more on the environmental aspects through the implementation of business activities. We can say, In the green marketing mix "The four Ps" (Product, Price, Place, and Promotion) are converted into "The four GPs"; (Green product, Green price, Green place, and Green promotion) with the purpose to include sustainability criteria into the marketing strategy.

In order to make sustainable business, the company should link its business to the environment through its marketing activities which also are known as marketing mix. In the following, we can illustrate how sustainability efforts are integrated across the green marketing mix: green product, green price, green place (distribution), and green promotion.

### **Green Product**

Product is the center of green marketing mix and the most essential part when the firm adopts the green marketing strategy (Fan and Zeng, 2011). Green Product can be described as a product that is produced to satisfy a legitimate human need and that is not harmful to the human health or the environment. The common characteristics of sustainable products are energy

efficient and non-polluting, long lasting and easy repairable, reusable and recyclable. These types of products are manufactured by using methods that do not have any negative impact on the environment. These methods focus on eco-friendly operations during manufacturing the product which reduce energy, process and water consumption, minimizing pollution and properly managing waste (Krishna, 2017). Danciu (2013) pointed out the green product is the product that minimizes its negative impact on resources used and environment and at the same time maximizes its positive impact on the society at each stage of its life cycle. These positive impacts could be the result of the design, materials use, water and energy consumption, packaging, delivery, usage method, and other attributes (Belz and Karstens, 2010). Tomasin et al., (2013) referred to the green products as those products that reduce the harmful impact on the environment and increase the usage of 6R concept of recover, reuse, recycle, redesign, reduce, and remanufacture. Costs that associated with producing green products may be relatively high, nevertheless, these costs are justifiable because all activities associated with such products (i.e. Packaging, wrapping, and even the product manufacturing itself) are significantly aid in preserving the environment (Arseculeratne and Yazdanifard, 2014).

### **Green Price**

Price is a key element and critical factor of green marketing mix. Many consumers assume that green products are often priced higher than conventional products, while their assumption may be not true (Peattie, 1999; Polonsky and Rosenberger, 2001). Peattie (1999) argues that these products are cheaper because reduction of harmful waste, reuse of water in industrial manufacturing, reusable packaging, recyclable products, etc. has resulted into substantial cost saving for company.

Consumers will be prepared to pay a premium - additional cost- for green product if it has environmental benefits and positive impact on both society and environment. Green cars community illustrates this phenomenon where these cars are basically designed to achieve fuel efficiencies, reducing energy consumption, and preserving the environment. Buyers of these cars incorporate these aspects into their purchase decisions, i.e. they will not pay the car value - which is relatively high- unless they are quite sure that they will get a superior benefits from acquisition this type of cars in addition to its positive impact on the environment (Manjunath and Manjunath, 2013).

### **Green Place**

Place (Distribution) is an essential activity in the marketing process and one of the pillars of the marketing mix. It refers to the physical location where a product can be purchased as well as

the movement of goods within the market. Product distribution should be through environmentally friendly channels, and correctly placed at environmentally safe place where there is no contamination whatever (Eric, 2007). Firms should adopt sustainable solutions to their distribution systems In order to ensure its survival in the market; the routes used to transport the goods should carefully considered and always strive to use the shortest possible route in order to have the smallest affection on the environment. In green distribution, logistics and supply chain should be very efficiently used so that fuel, time, energy and funds are not wasted (Krishna, 2017).

The green distribution should work in two strategic directions in order to support the sustainable development. The first direction is providing the customers with sustainable products. The second direction including the efforts for lowering consumption of materials and energy, reducing waste of resources and pollution, how close the facilities to suppliers and retailers, encourage the development of a recycling infrastructure (Charter et al., 2002). All these factors should be considered so that the purchasing costs of the consumers as well as environmental and social negative effects can be decreased (Belz and Karstens, 2010). Generally, for green places to be developed, companies have to make sure that their distributors are concerned with the environment and establish a green distribution strategy (Eric, 2007).

### **Green Promotion**

Promotion is a vital element of the green marketing mix; it refers to the communication process that aims to influence consumers' purchase behavior by encouraging them to buy products that do not hurt the environment and to direct their interest to the positive consequences of their purchase behavior for themselves as well as for the environment (Rahbar and Abdul Wahid, 2011). More comprehensively, green promotion explains to the customer how the green product contributes to sustainable development, in addition, it seeks to connect the firm with its customers and transfer its orientations and environmental image to them via product- or service-related marketing messages.

In general, promotion activity consists of a set of integrated elements called promotional mix elements (i.e., personal selling, public relations, sponsorship, and green advertisements), which facilitate the success of the promotional process (Al-Salaymeh, 2013). Each one of these elements can contribute in achieving sustainability, as follows:

- When using personal selling, the sales representatives must be well-versed in environmental issues, in order to be able to communicate the benefits of green products and services in a way that benefits both the customer and the organization.

- Public relations agencies also should adopt the promotion of the company's sustainability initiatives, as they reflect the company's image in how environmentally friendly it is.
- Sponsorship also can provide direct environmental benefits to the company, as well as to event or group that is being sponsored. The company can sponsor the activities or initiatives that preserve the environment or providing sponsorship for competitions aimed at sustainable development.
- Companies can promote the product through e-mails, and chatting instead of sending magazines. Also, stores can address sustainability issues using several methods as motivating customers to purchase local products, use of re-usable shopping bags, and recycled packaging.

### **CONCEPT OF CUSTOMER SATISFACTION**

Nowadays, the existence and survival of many companies on the market is conditioned with achieving customer satisfaction. Customers are the key factor of the existence and company development on the market. So, firms which want to face the competition need to provide valuable and unique terms to their customers that will satisfy their wants and needs. This satisfaction includes not only the feelings associated with the purchasing process, but also the value and quality of product or service provided. In the matter of fact, customers do not pay for the product in a physical sense, but they pay for the value or what they expect from this product as the product value plays a very important role in customers' purchasing decision.

Kotler and Kevin (2012) defined customer satisfaction as a person's intentions of pleasure or disappointment resulting from product's perceived performance compared with his or her expectations. According to Oliver (1997), customer satisfaction is a judgment that a product or service features provide a pleasurable level of consumption related to fulfillment. Halstead et al., (1994) refer to customer satisfaction as transaction-specific affective response resulting from the customer's comparison of product performance to some pre-purchase standards. The opinion that customer satisfaction is a comparison between what is expected and what is obtained also supported by Soderlund, 2003 who stated that customer satisfaction is results from the customer's comparison of expectation prior to a purchase with actually perceived after purchase. The same opinion proposed also by Fecikova, 2004 who referred to customer satisfaction as a state results from a process of evaluating what customer received and what they are expected, in other words, it is the suitability between the perception and the expectation of the purchased product or service (Supriadi et al., 2017).

From this explanation we can conclude that customer satisfaction is a customer judgment and results from comparison consumer expectations of the product or service with his or her perception of actual benefits delivered. The proposed conceptual model that depicts the



relationship between green marketing mix strategy and customer satisfaction is illustrated in the following figure.

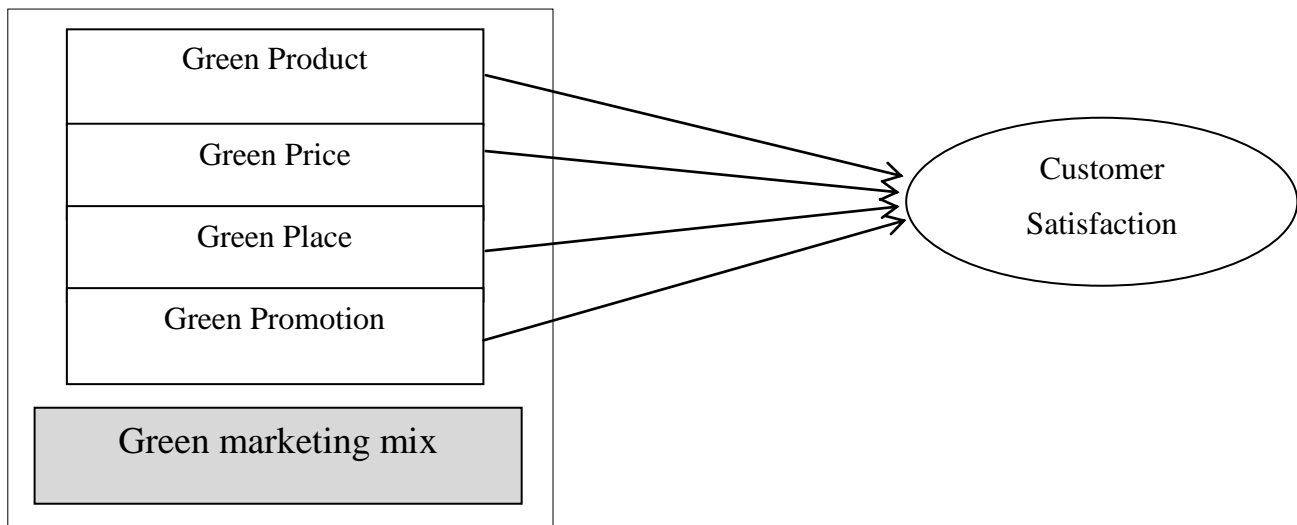


Figure 1. The proposed conceptual model (4Ps green model)

## METHODOLOGY

This descriptive study was conducted in two stages. Stage one involved a pilot study which was conducted on 20 questionnaires to refine the data gathering instrument. In this stage, the following statistical procedures are executed.

### Ensuring the Validity

Validity is the extent to which the questionnaire accurately measures what it is supposed to measure (Carmines and Zeller, 1979). Eriksson and Wiedersheim (1997) defined the validity as: “the ability of a scale or instrument to measure what is intended to be measured”. In this research, the content validity has been applied to ensure the validity of questionnaire. The pilot study was conducted with the reviewed version of the questionnaire among twenty green products consumers, who ensured that the questionnaire is appropriate and the statements are generally understandable. Based on this information, the questionnaire is finalized.

### Ensuring the Reliability

Reliability is the internal consistency of the questionnaire. In other words, it is the extent to which the questionnaire yields the same results on repeated trials under the same conditions (Carmines and Zeller, 1979). The questionnaire is considered reliable when the same or similar scores are obtained in repeated testing with the same group of respondents (Miller, 2005). In

this research, Cronbach's alpha coefficient for internal consistency technique is used to ensure the reliability of questionnaire (Nunnally and Bernstein, 1994; Gliem & Gliem, 2003). The results of Cronbach's alpha are depicted in table1.

Table 1: Reliability test

Cronbach's alpha coefficient	N of items
.894	22

Cronbach's alpha reliability coefficient normally ranges between 0 and 1. The closer Cronbach's alpha coefficient is to 1.0, the greater the internal consistency of the items in the scale (Gliem and Gliem, 2003). Values of 0.7 and above are usually considered adequate values of coefficient alpha (Nunnally and Bernstein, 1994), while Gliem (2003) mentioned that the alpha reliability coefficient of .8 is a reasonable goal. In our study, Cronbach's alpha reliability coefficient = .894 which means this questionnaire is highly reliable.

### **The Sample and Data Collection**

After ensuring the validity and reliability of the questionnaire, the researcher starts stage two which involved distribution of 300 surveys to a random sample of green products consumers. The researcher determined the estimated sample size by using the statistical application Epilinfo. Respondent was asked to show the extent to which he or she believes his/her firm has the feature described by statement on a five point Likert scale ranging from 1 indicating strongly disagree to 5 indicating strongly agree. The usable observations were 276 respondents with response ratio 92%.

## **ANALYSIS**

### **Correlation Analysis**

The main purpose of correlation is to prove if there is a relationship between two variables or not. In addition, if there is a relationship, it measures the strength and direction of such relationship. So, this technique considers the most appropriate method to statistically clarify the nature of relationship between green product, green price, green place, and green promotion from one side and customer satisfaction in Egyptian market from other side. Also, this technique will be used to discover the strength and the direction of relationship between the dependent variable (customer satisfaction) and each one of the independent variables (the items of green marketing mix). The results of correlation analysis are listed in table 2.

Table 2: Results of correlation analysis (*r*)

		Item 1 Green Product	Item 2 Green Price	Item 3 Green Place	Item 4 Green Promotion	Customer Satisfaction
Item 1 Green Product	Pearson Correlation	1	.386**	.459**	.375**	.790**
Item 2 Green Price	Pearson Correlation	.386**	1	.615**	.789**	.189**
Item 3 Green Place	Pearson Correlation	.459**	.615**	1	.488**	.656**
Item 4 Green Promotion	Pearson Correlation	.375**	.789**	.488**	1	.565**
Customer Satisfaction	Pearson Correlation	.790**	.189**	.656**	.565**	1

\*\* . Correlation is significant at the 0.01 level (2-tailed).

- The above results reached about the correlation coefficient values show that there is a positive relationship between all elements of green marketing mix and customer satisfaction.
- Element 1; green product is highly correlated with customer satisfaction, the correlation coefficient for this relationship is 0.790, followed by element 3; green place 0.656, then element 4; green promotion 0.565, and the last is element 2; green price 0.189.

### Multiple Regression Analysis

To find out which of the green marketing mix elements have the most influence on customer satisfaction, the researcher conducted the multiple regression analysis. The overall idea of regression is to examine two things: (1) does a set of predictor variables (independent variables) do a good job in predicting an outcome variable (dependent variable)? (2) Which independent variables in particular are significant predictors of the outcome variable, and in what way do they impact the outcome variable? The results of multiple regression analysis are listed in table 3.

Table 3: Results of multiple regression analysis

Model	$\beta$
Constant (-10.738)	
Green Product	.586
Green Price	.063
Green Place	.352
Green Promotion	.215
R Square = .768	

Predictors: (Constant), Green Promotion,  
Green Product, Green Place, Green Price

- R square measures the percentage of the change in the dependent variable -customer satisfaction- caused by the independent variables -green 4Ps- (Daniel, 1995). Here, R square shows that 76.8% of the change in the customer satisfaction is caused by those independent variables (green product, green price, green place, and green promotion).
- The results show also that the green marketing mix is a positive significantly influence on customer satisfaction, i.e. green product has the highest impact on customer satisfaction ( $\beta=0.586$ ), followed by green place ( $\beta=0.352$ ), then green promotion ( $\beta=0.215$ ), and the last element is green price ( $\beta=0.063$ )
- The positive values of the regression coefficients confirm that the customer satisfaction (dependent variable) moves in the same direction as the independent variables.

### Stepwise Regression

For further analysis, the researcher used stepwise regression analysis to reach the most important elements that strongly influence the customer satisfaction (Table 4).

Table 4: Results of stepwise regression analysis

Model	$\beta$
Constant (-10.767)	
Green Place	.371
Green Product	.598
Green Promotion	.193
R Square = .764	

Predictors: (Constant), Green Promotion, Green Product, Green Place

- R square shows that 76.4% of the change in the customer satisfaction is caused by these independent variables (green product, green place, and green promotion).
- Green product has the highest influence on customer satisfaction ( $\beta=0.598$ ), followed by green place ( $\beta=0.371$ ), then green promotion ( $\beta=0.193$ ).

## CONCLUSION AND STRATEGIC IMPLICATIONS

The main objective of this study is to find out what is the impact of adopting the green marketing mix by Egyptian firms on satisfaction of its customers. In other words, is there relationship between green product, green price, green place, and green promotion from one side and customer satisfaction in Egyptian market from other side?. In addition, this research aims to explore the contribution of each component of this marketing mix in achieving customer satisfaction. The finding of this study demonstrates the significant positive impact of green marketing mix on customer satisfaction. So, companies must adopt the new concept of marketing (green marketing) and this adoption must be reflected in their marketing mix.

The results reached about the correlation coefficient values show that there is a positive relationship between each element of green marketing mix and customer satisfaction. The correlation coefficient between green product and customer satisfaction is 0.790 which means the customer tends to buy the products that is energy efficient and non-polluting, long lasting and easy repairable, reusable, recyclable, and manufactured by using methods that do not have negative impact on the environment.

The correlation coefficient between green place and customer satisfaction is 0.656 which means the customer prefers to purchase the products that are distributed through environmentally satisfactory channels, and clearly and correctly placed at environmentally safe place where there is no pollution whatever.

The correlation coefficient between green promotion and customer satisfaction is 0.565 which means the customer prefers to purchase his products from sales representative who well-versed in environmental issues, so that they can communicate the benefits of sustainable products and services in a way that is beneficial for both the customer and organization. In addition, the consumer prefers to inform him with new products and offers through social media, not by sending printed magazines.

The correlation coefficient between green price and customer satisfaction is 0.189; it is weak correlation which means the customer response to increasing the price of a product is not absolute but conditional on the benefits that accrue to him from purchasing this product. It is consistent with what Ottman, 1998 reached. He pointed out that consumers are actually not interested in paying more for a product declared "green" unless it has environmental benefits

and positive impact on both customer and society so that the customer can willingly pay the additional cost.

The results reached about the stepwise regression show that the most important elements of green marketing mix that increase customer satisfaction are: green product, it has the highest influence on customer satisfaction, followed by green place, then green promotion. So, marketers and practitioners should pay more attention to such elements to yield the highest customer satisfaction.

## **RECOMMENDATIONS**

- Green marketing is one of the most important business strategies that helps in ensuring sustainable development. It implies meeting current needs without sacrificing the benefits of future generations because it promotes ways to rational utilize for limited resources. That's why more strategies are being sought to respond to unlimited consumer needs with limited resources, and one of these strategies is green marketing mix.
- Firms must produce products that minimize its negative impact on resources used and environment and at the same time maximizes its positive impact on the society at each stage of its life cycle.
- Firms should keep into consideration that consumers will be prepared to pay additional cost for purchasing the green product if it has environmental benefits and positive impact on the society.
- Firms should adopt sustainable solutions to their distribution systems In order to ensure its survival in the market.
- Firms should adopt promotional methods that aim to influence consumers' purchase behavior by encouraging them to buy products that do not harm the environment.

## **LIMITATIONS AND FURTHER STUDIES**

- In spite of this study provided empirical evidence that green marketing mix has a positive impact on customer satisfaction in Egyptian market, nevertheless, the researcher recommends to conduct more researches related to the same objective but after dividing the customers into segments either in terms of age or income. In this respect, a clearer picture might be offered in terms of the impact of each element of the green marketing mix on customer satisfaction.
- This study dealt with 4 elements of the Marketing Mix; Product, Price, Place, and Promotion. In the future, the researcher recommends to expand the scope of this

research by taking the other 3 elements of marketing mix that have been mentioned in some literatures; people, procedures, and physical environment.

- Finally, this study was limited to identifying the most important elements of green marketing mix that strongly influence the customer satisfaction. However, it is recommended in the future to construct a mathematical model to predict the level of customer satisfaction provided in Egyptian market.

## REFERENCES

- Al-Salaymeh, M. (2013). The Application of the Concept of Green Marketing in the Productive Companies From the Perspective of Workers. *Interdisciplinary journal of contemporary research in business*, 4(12), 634-641.
- Arseculeratne, D., and Yazdanifard, R. (2014). How Green Marketing Can Create a Sustainable Competitive Advantage for a Business?. *International Business Research*, 7(1), 130-137.
- Belz, F. and Karstens, B. (2010). Strategic and Instrumental Sustainability Marketing in the Western European Food Processing Industry: Conceptual Framework and Hypothesis, in: *Proceedings of the Corporate Responsibility Research Conference*, Euromed Management School Marseille France, September, 15-17.
- Belz, F. and Peattie, K. (2012). *Sustainability Marketing: A Global Perspective* (2nd ed.). Chichester Wiley.
- Carmines, G. and Zeller, A. (1979). *Reliability and Validity Assessment*. Sage Publications Inc.
- Charter, M., Peattie, K., Ottman, J. & Polonsky, J. (2002). *Marketing and sustainability*. Retrieved from <http://www.cfsd.org.uk/smart-know-net/links/smart-know-net.pdf>
- Danciu, D. (2013). The Contribution of Sustainable Marketing to Sustainable Development. *Management & Marketing Challenges for the Knowledge Society*, 8(2), 385-400
- De Craecker, F., and De Wulf, L. (2009). *Integration of Green Marketing within the Automotive Industry-A case study of four car manufacturers on the Belgian market*. Doctoral dissertation, Halmstad University.
- Domazet, I. and Jovanović, O. (2016). Environment and Technogenic Pollution Sources. *Ecologica*, 23(83), 529-533.
- Domazet, I., Simović, V. (2015). *Creation of Green Jobs: Opportunity to Reduce High Unemployment in Western Balkans*, In *Monograph Toward Green Economy: Opportunities and Obstacles for Western Balkan Countries*, Ed.: Radović Marković M et al. Xlibris LLC: USA.
- Eric, K. (2007). *Green Marketing practices by Kenya Petroleum Refineries: A Study of the Perception of the Management of oil Marketing Companies in Kenya*. Doctoral Dissertation, University of Nairobi. Kenya.
- Eriksson, L. and Wiedersheim, F. (1997). *Att Utreda, Forska och Rapportera*. Malmö: Liber Ekonomi.
- Fan, H. and Zeng, L. (2011). *Implementation of Green Marketing Strategy in China: A study of the green Food Industry*. M.Sc. Thesis, University of GAVLE, China.
- Fecikova, I. (2004). An Index Method for Measurement of Customer Satisfaction. *TQM Magazine*, 16(1), 57-68.
- Ghoshal, M. (2011). *Green Marketing- A Changing Concept in Changing Time*. *BVIMR, Management Edge*. 4(1), 82-92.
- Gliem, A. and Gliem, R. (2003). Calculating, Interpreting, and Reporting Cronbach's Alpha Reliability Coefficient for Likert-Type Scales. *Midwest Research to Practice Conference in Adult, Continuing, and Community Education*, 82-88.
- Halstead, D., Hartman, D., and Sandra, L. (1994). Multisource Effects on the Satisfaction Formation Process. *Journal of the Academy of Marketing Science*, 22(2), 114-129.
- Kotler, P. (2003). *Marketing Management* (11th ed.). Prentice Hall. International Editions.
- Kotler, P. and Keller, K. (2012). *Marketing Management* (14th ed.). New Jersey: Prentice Hall.
- Krishna, D. (2017). *A study on Impact of Green Marketing on Sustainable Development (With Reference to Khammam District)*. Retrieved from <https://www.researchgate.net/publication/331223872>

- Leonidou, C., Katsikeas, C., & Morgan, N. (2013). Greening The Marketing Mix: Do Firms do it and Does it pay off?. *Journal of the Academy of Marketing Science*, 41(2), 151-170.
- Li, H. and Cai, W. (2009). Green Marketing and Sustainable Development of Garment Industry-A Game between Cost and Profit. *International Journal of Business and Management*, 3(12), 81-85.
- Manju, (2012). Green Marketing: New Hopes and Challenges. *Spectrum: A Journal of Multidisciplinary Research*, 1(9), 40-47.
- Manjunath, G., and Manjunath, G. (2013). Green Marketing and Its Implementation in Indian Business Organizations. *Asia Pacific Journal of Marketing & Management Review*, 2(7), 75-86.
- Miller, J. (2005). *Reliability and Validity*. Graduate Research Methods, Western International University.
- Mintu, T., Lozada, R., and Polonsky, J. (1993). *Environmental Issues in the Curricula of International Business: the green imperative*. Haworth Press Inc.
- Nandini, M. (2011). A conceptual Framework on Green Marketing – A tool For Sustainable Development. *International Journal of Sales and Marketing Management*, 1(1), 1-16.
- Nunnally, J. and Bernstein, H. (1994). *Psychometric Theory* (3rd ed.). New York: The McGraw-Hill.
- Oliver, L. (1997). *Satisfaction: A Behavioral Perspective on the Consumer*. New York: The McGraw-Hill.
- Ottman, J. (1998). *Green Marketing: Opportunity for Innovation*. USA: NTC Business Books.
- Peattie K, (1999). *Shifting to a Greener Paradigm – Greener marketing, A Global Perspective on Greening Marketing Practices* (C.M.M.ed.). Greenleaf Publishing Limited.
- Polonsky, J. (1994). An Introduction to Green Marketing. *Electronic Green Journal*, 1(2), 1-10.
- Polonsky, J. and Rosenberger, J. (2001). Re-evaluating Green Marketing: A Strategic Approach. *Business Horizons*, 44(5), 21-33.
- Pride, W., Ferrell, O. (1993). *Marketing-Concepts and Strategies*. Houghton- Mifflin: Boston, MA.
- Rahbar, E. and Abdul Wahid, N. (2011). Investigation of Green Marketing Tools' Effect on Consumers' Purchase Behavior. *Business Strategy Series*, 12(2), 73-83.
- Soderlund, M. (2003). The Retrospective and the Prospective Mind and the Temporal Framing of Customer Satisfaction. *European Journal of Marketing*, 37(10),1375-1389.
- Stanton, W.J. and Futrell, C. (1987). *Fundamentals of Marketing*. New York: The McGraw-Hill.
- Supriadi, B., Astuti, W., and Firdiansyah, A. (2017). Green Product and Its Impact on Customer Satisfaction. *Open journal of Business and Management*, 19(8), 35-42
- Tomasin, L., Pereira, G. , Borchardt, M., & Sellitto, M. (2013). How Can The Sales of Green Products in the Brazilian Supply Chain be Increased?. *Journal of Cleaner Production*, 47, 274-282.
- Zaharia, C., Zaharia I., and Tudorescu, N. (2010). Ecological Economics, Sustainable Development and Environmental Justice. *Economics, Management, and Financial Markets*, 5(2), 297-303.